

The Trail Inventory of Hagerman NWR Sherman, TX



Prepared By:
Federal Highway Administration
Central Federal Lands Highway Division
February, 2012



TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
I. <u>TRAIL AND TRAIL FEATURE SUMMARIES</u>	1 - 1
II. <u>TRAIL LOCATION MAPS</u>	2 - 1
III. <u>TRAIL IDENTIFICATION LIST</u>	3 - 1
IV. <u>TRAIL CONDITION RATING SHEETS</u>	4 - 1
V. <u>TRAIL DEFICIENCY RATING SHEETS</u>	5 - 1
VI. <u>PHOTOGRAPHIC SHEETS</u>	6 - 1
VII. <u>GLOSSARY</u>	i

Hagerman NWR

Trail and Trail Feature Summaries

Trail Miles and Percentages by Surface Type and Condition

Trail Surface Type	Excellent		Good		Others		Total
	Miles	%	Miles	%	Miles	%	Miles
Native	0.11	100%	0.00	0%	0.00	0%	0.11
Mowed	1.35	73%	0.49	27%	0.00	0%	1.84
Admin Road	0.00	0%	0.00	0%	4.98	100%	4.98
Total	1.46	21%	0.49	7%	4.98	72%	6.93

Trail Miles and Percentages by Trail Classification and Condition

Trail Classification	Excellent		Good		Others		Total
	Miles	%	Miles	%	Miles	%	Miles
TC3	1.39	68%	0.49	24%	0.15	7%	2.03
TC4	0.07	1%	0.00	0%	4.83	99%	4.90
Total	1.46	21%	0.49	7%	4.98	72%	6.93

*Admin Roads are included in the inventory but are not rated for condition.

Trail Features

Trail Number	Feature Type	Quantity	Grouped Feature	Milepost	Photo
T300	Gate	1	No	0.00	HAGE_C2_1460
T300	Trailhead	1	No	0.00	HAGE_C2_1459
T300	Sign	2	No	0.00	HAGE_C2_1461
T300	Culvert -lf	40	No	0.05	
T300	Sign	1	No	0.15	HAGE_C2_1462
T300	Begin Section	1	No	0.15	HAGE_C2_1463
T300	Sign	13	Yes	0.16	HAGE_C2_1464
T300	Begin Section	1	No	0.19	
T300	Sign	0	Yes	0.20	
T300	Sign	0	Yes	0.23	
T300	Bench	1	No	0.23	
T300	Sign	0	Yes	0.24	
T300	Sign	0	Yes	0.28	
T300	Sign	0	Yes	0.31	
T300	Sign	0	Yes	0.33	
T300	Sign	0	Yes	0.36	
T300	Sign	0	Yes	0.42	
T300	Sign	0	Yes	0.45	
T300	Lookout/Ob Deck	1	No	0.47	
T300	Bench	1	No	0.47	
T300	Sign	0	Yes	0.48	
T300	Sign	0	Yes	0.51	
T300	Sign	0	Yes	0.54	
T301	Sign	1	No	0.00	HAGE_C2_0501
T301	Trailhead	1	No	0.00	HAGE_C2_0501
T301	Step: Log -each	4	No	0.00	
T301	Bridge -sf	80	No	0.01	HAGE_C2_0502
T301	Sign	1	No	0.07	HAGE_C2_0503
T301	Sign	1	No	0.07	HAGE_C2_0504
T301	Lookout/Ob Deck	1	No	0.07	

T301	Sign	1	No	0.17	HAGE_C2_050 7
T301	Sign	1	No	0.39	HAGE_C2_050 8
T301	Bench	1	No	0.40	
T301	Begin Section	1	No	0.40	HAGE_C2_052 3
T301	Sign	1	No	0.43	HAGE_C2_052 4
T301	Lookout/Ob Deck	1	No	0.43	
T301	Sign	1	No	0.46	HAGE_C2_051 9
T301	Begin Section	1	No	0.49	HAGE_C2_051 1
T301	Sign	1	No	0.51	HAGE_C2_051 0
T301	Culvert -lf	20	No	0.59	
T301	Sign	1	No	0.65	HAGE_C2_051 2
T301	Begin Section	1	No	0.66	HAGE_C2_051 3
T301	Sign	1	No	0.67	HAGE_C2_051 5
T301	Sign	3	No	0.86	HAGE_C2_051 6
T301	Begin Section	1	No	0.87	HAGE_C2_051 7
T301	Sign	1	No	1.03	HAGE_C2_051 8
T301	Sign	1	No	1.17	HAGE_C2_052 0
T301	Bench	1	No	1.19	
T301	Sign	1	No	1.20	HAGE_C2_052 1
T301	Sign	1	No	1.24	HAGE_C2_052 2
T301	Lookout/Ob Deck	1	No	1.24	
T400	Trailhead	1	No	0.00	HAGE_C2_145 6
T400	Sign	1	No	0.00	HAGE_C2_145 7
T400	Other	1	No	0.07	
T400	Begin Section	1	No	0.07	HAGE_C2_145 8
T400	Sign	1	No	0.07	HAGE_C2_047 9
T400	Bridge -sf	60	No	0.24	HAGE_C2_048 0
T400	Bench	1	No	0.25	
T400	Bench	1	No	0.50	

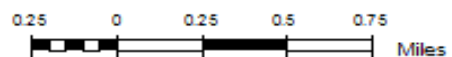
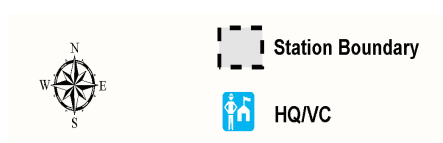
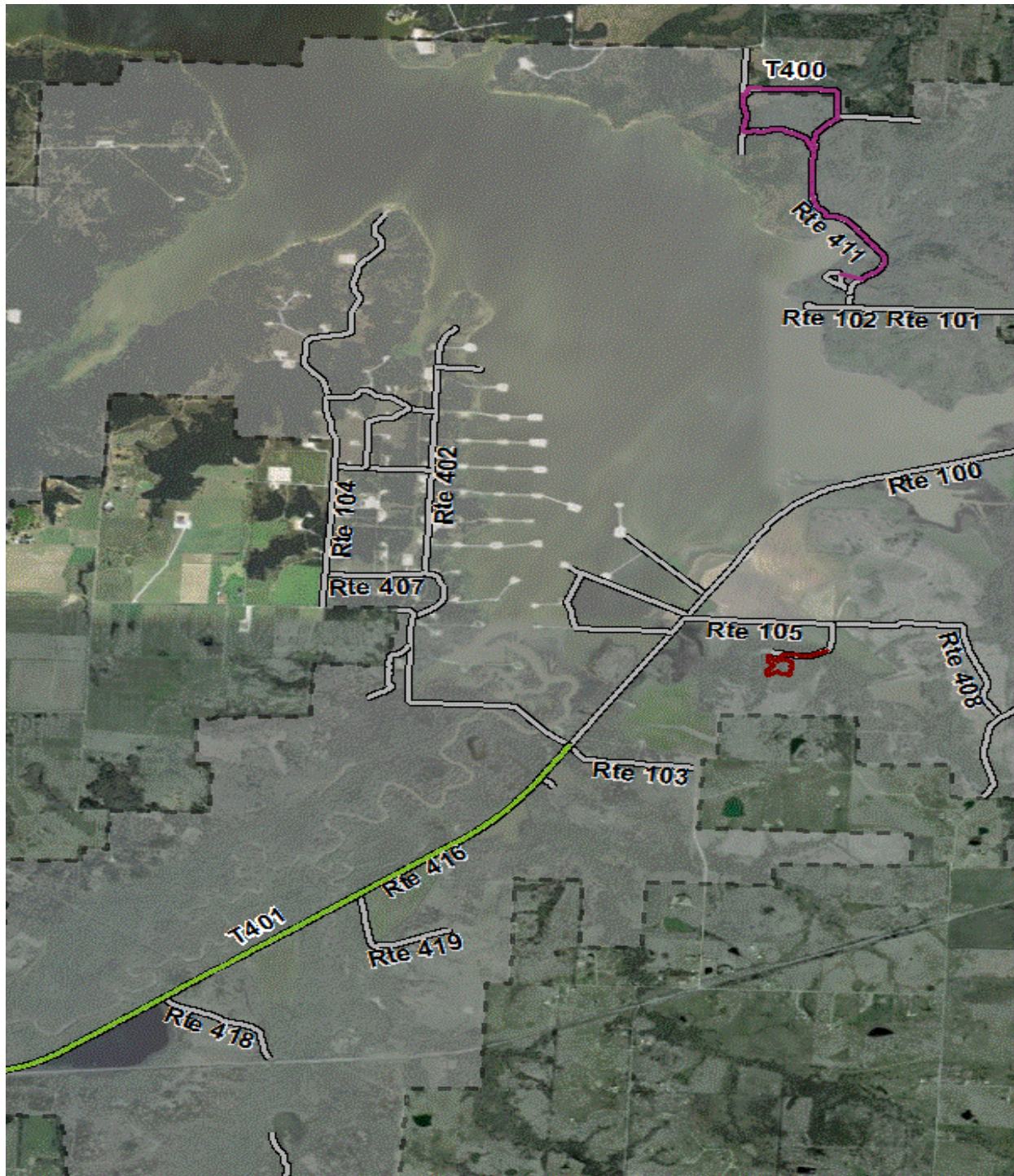
T400	Sign	1	No	0.84	HAGE_C2_048 2
T400	Sign	1	No	1.01	HAGE_C2_048 3
T400	Culvert -lf	45	No	1.15	
T400	Sign	1	No	1.47	HAGE_C2_048 5
T400	Sign	1	No	1.48	HAGE_C2_048 4
T400	Begin Section	1	No	1.48	
T400	Sign	2	No	1.66	HAGE_C2_048 7
T401	Gate	1	No	0.00	
T401	Sign	1	No	0.00	HAGE_C2_146 6
T401	Trailhead	1	No	0.00	HAGE_C2_049 1
T401	Sign	1	No	0.29	HAGE_C2_146 5
T401	Bench	1	No	0.30	
T401	Other	1	No	0.41	
T401	Bridge -sf	60	No	0.76	HAGE_C2_049 2
T401	Bridge -sf	62	No	1.04	HAGE_C2_049 3
T401	Bridge -sf	44	No	1.17	HAGE_C2_049 5
T401	Bench	1	No	1.84	
T401	Sign	1	No	1.84	HAGE_C2_049 6
T401	Other	1	No	2.02	

sf - square feet

lf - linear feet

cf - cubic feet

Hagerman NWR Trail Location Map



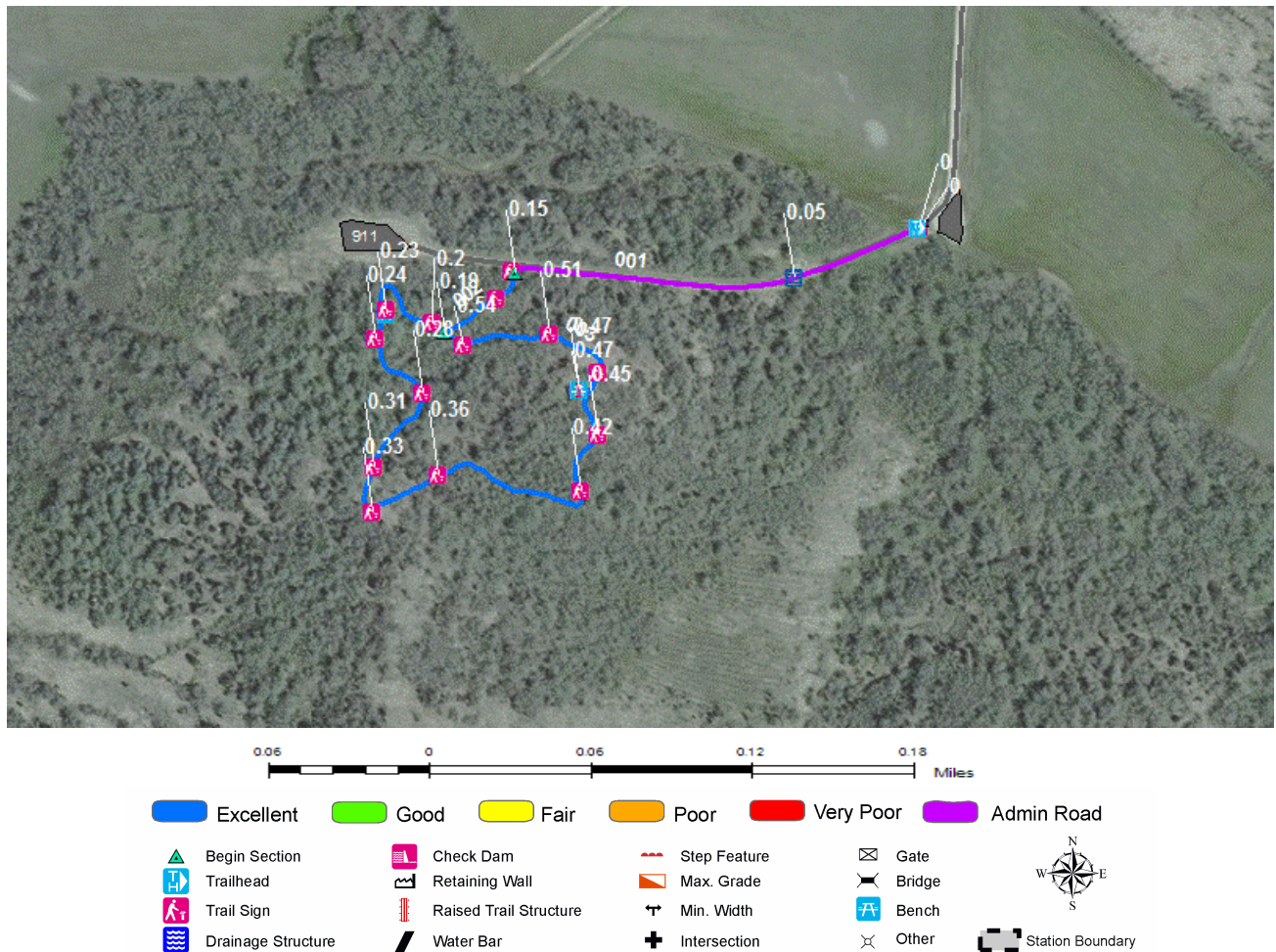
Trails ID

Station Name: Hagerman NWR

Org Code: 21580

Trail Number	Trail Name	Surface Type	SAMMS	Trail Mileage	Trail Description (Begin and End point of trail)
T300	Crow Hill Trail	Admin Road	10008028	0.15	From Crow Hill Parking # 2 (Rte 918) to End of Loop
T300	Crow Hill Trail	Mowed	10008028	0.36	From Crow Hill Parking # 2 (Rte 918) to End of Loop
T300	Crow Hill Trail	Native	10008028	0.04	From Crow Hill Parking # 2 (Rte 918) to End of Loop
T301	Harris Creek Trail	Mowed	N/A	1.48	From Harris Creek Trailhead Parking (Rte 901) to End of Loop
T400	Haller's Haven Nature Trail	Admin Road	N/A	1.87	From Goode Road (Rte 101) to End of Loop
T400	Haller's Haven Nature Trail	Native	N/A	0.07	From Goode Road (Rte 101) to End of Loop
T401	Meadow Pond Trail	Admin Road	N/A	2.96	From Shotgun Alley Road (Rte 103) to End of Trail

TRAIL CONDITION



Trail Name: Crow Hill Trail
Trail Number: T300

Refuge Name: Hagerman NWR
Region: 2

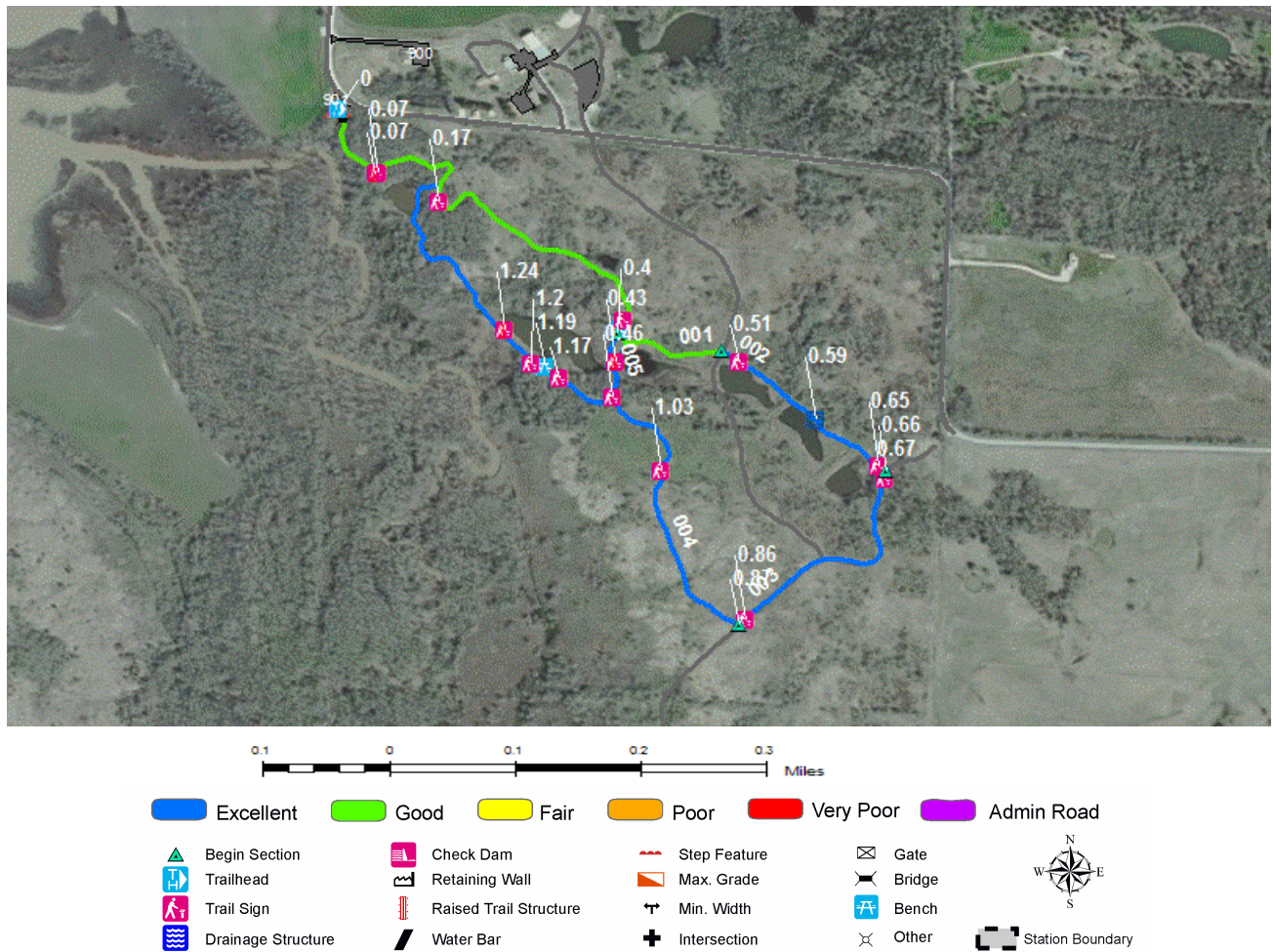
Total Length: 0.55 Miles

Section Number	001	002	003
Section Length (miles)	0.15	0.04	0.36
SAMMS Number	10008028	10008028	10008028
Rating Date	09/13/2011	09/13/2011	06/16/2006
Trail Section Information			
Trail Class	TC3	TC3	TC3
Surface Type	Admin Road	Native	Mowed
Surface Firmness	Hard	Hard	Hard
Width (inches)	144	70	70
Average Grade (%)	8.1	8.1	8.1
Average X-slope (%)	5.50	5.50	5.50
Trail Condition Information			
Deferred Maintenance			
CRV		\$4,830	\$10,867
FCI		0.00	0.00
Condition		Excellent	Excellent

Trail Condition TOTALS

Deferred Maintenance	CRV	FCI	Condition
	\$15,697	0.00	Excellent

TRAIL CONDITION



Trail Name: Harris Creek Trail
Trail Number: T301

Refuge Name: Hagerman NWR
Region: 2

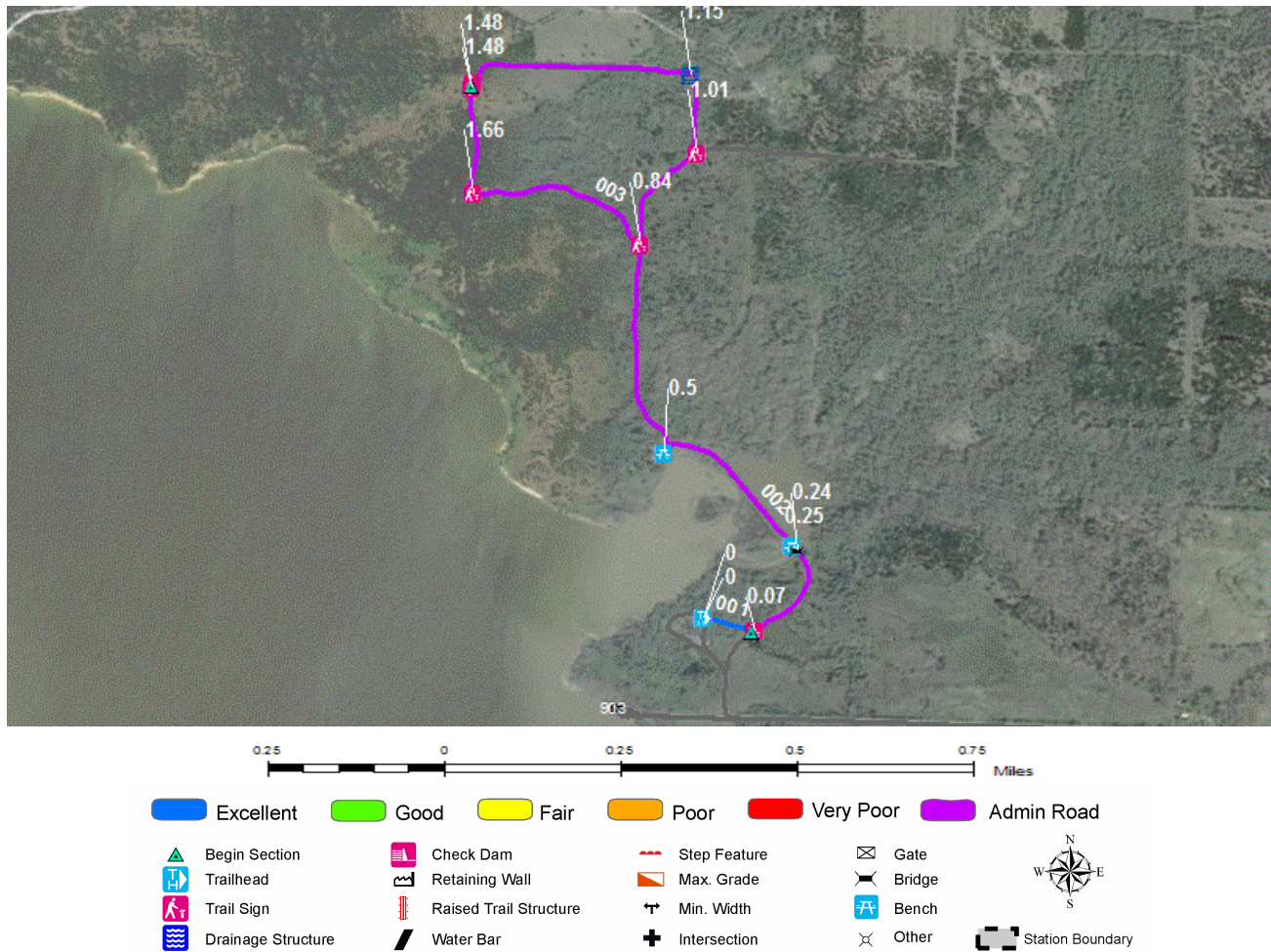
Total Length: 1.48 Miles

Section Number	001	002	003	004	005
Section Length (miles)	0.49	0.17	0.21	0.55	0.06
SAMMS Number	N/A	N/A	N/A	N/A	N/A
Rating Date	09/13/2011	06/16/2006	06/16/2006	06/16/2006	06/16/2006
Trail Section Information					
Trail Class	TC3	TC3	TC3	TC3	TC3
Surface Type	Mowed	Mowed	Mowed	Mowed	Mowed
Surface Firmness	Hard	Firm	Firm	Hard	Hard
Width (inches)	70	70	100	70	70
Average Grade (%)	10.4	10.4	10.4	10.4	10.4
Average X-slope (%)	5.30	5.30	5.30	5.30	5.30
Trail Condition Information					
Deferred Maintenance	\$1,142				
CRV	\$14,792	\$5,132	\$9,056	\$16,603	\$1,811
FCI	0.05	0.00	0.00	0.00	0.00
Condition	Good	Excellent	Excellent	Excellent	Excellent

Trail Condition TOTALS

Deferred Maintenance	CRV	FCI	Condition
\$1,142	\$47,394	0.02	Good

TRAIL CONDITION



Trail Name: Haller's Haven Nature Trail
Trail Number: T400

Refuge Name: Hagerman NWR
Region: 2

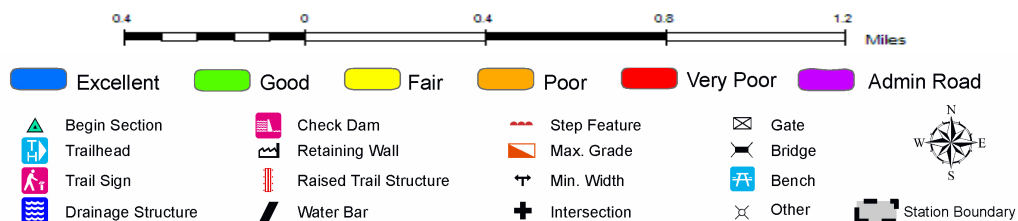
Total Length: 1.94 Miles

Section Number	001	002	003
Section Length (miles)	0.07	1.41	0.46
SAMMS Number	N/A	N/A	N/A
Rating Date	09/13/2011	06/16/2006	06/16/2006
Trail Section Information			
Trail Class	TC4	TC4	TC4
Surface Type	Native	Admin Road	Admin Road
Surface Firmness	Hard	Hard	Hard
Width (inches)	70	125	125
Average Grade (%)	0.0	0.0	0.0
Average X-slope (%)	0.00	0.00	0.00
Trail Condition Information			
Deferred Maintenance			
CRV	\$8,452		
FCI	0.00		
Condition	Excellent		

Trail Condition TOTALS

Deferred Maintenance	CRV	FCI	Condition
	\$8,452	0.00	Excellent

TRAIL CONDITION



Trail Name: Meadow Pond Trail
Trail Number: T401

Refuge Name: Hagerman NWR
Region: 2

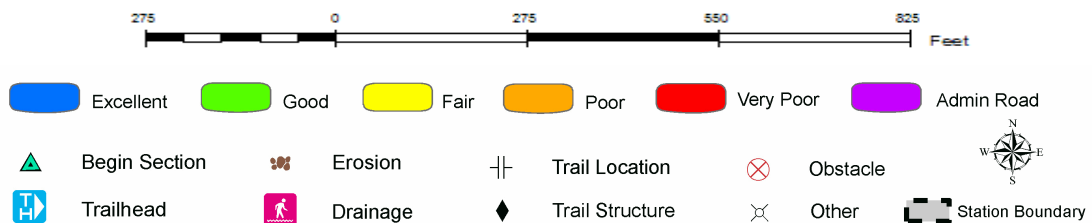
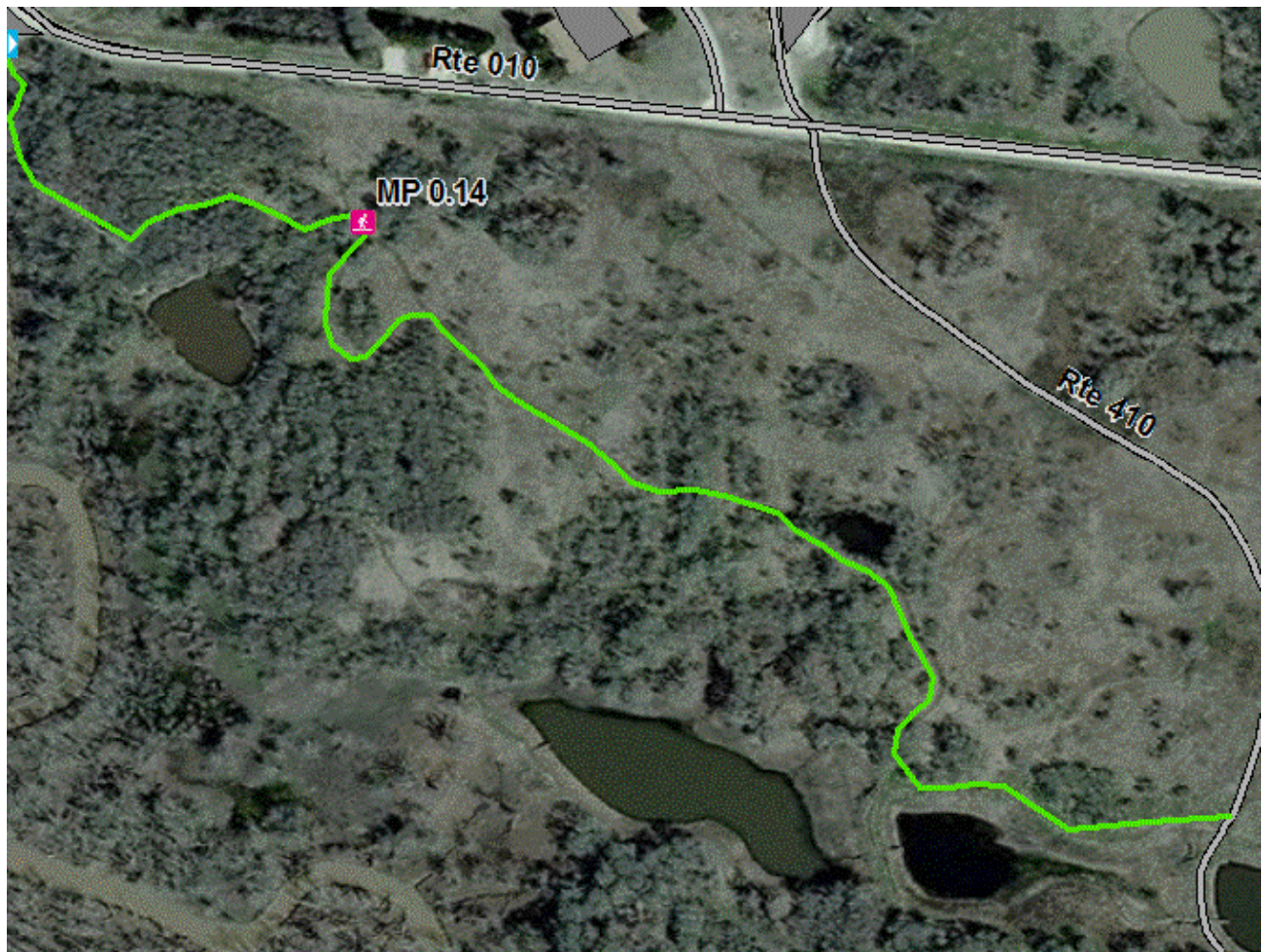
Total Length: 2.96 Miles

Section Number	001
Section Length (miles)	2.96
SAMMS Number	N/A
Rating Date	06/16/2006
Trail Section Information	
Trail Class	TC4
Surface Type	Admin Road
Surface Firmness	Hard
Width (inches)	130
Average Grade (%)	0.0
Average X-slope (%)	0.00
Trail Condition Information	
Deferred Maintenance	
CRV	
FCI	
Condition	

Trail Condition TOTALS

Deferred Maintenance	CRV	FCI	Condition

TRAIL DEFICIENCY



Trail Name: Harris Creek Trail

Refuge Name: Hagerman NWR

Trail Number: T301

Region: 2

Total Length: 1.48 Miles

Mile Post	0.14
Section Number	001
Photo Number	HAGE_C2_0506
Deficiency	Drainage
Action	Replace
Item	Culvert -lf
Quantity	10
Deferred Maintenance	\$1,142

TRAIL DEFICIENCY



Trail Name: Harris Creek Trail

Refuge Name: Hagerman NWR

Trail Number: T301

Region: 2

Total Length: 1.61 Miles

Mile Post	0.14
Section Number	001
Photo Number	HAGE_C2_0506
Deficiency	Drainage
Action	Replace
Item	Culvert -lf
Quantity	10
Deferred Maintenance	\$1,142

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T300
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1459 - MP 0.00 - Trailhead

TRAIL NUMBER: T300
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1460 - MP 0.00 - Gate

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T300
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1461 - MP 0.00 - Sign

TRAIL NUMBER: T300
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1462 - MP 0.15 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T300
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1463 - MP 0.15 - Begin Section

TRAIL NUMBER: T300
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1464 - MP 0.16 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0501 - MP 0.00 - Trailhead

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0501 - MP 0.00 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0502 - MP 0.01 - Bridge -sf

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0503 - MP 0.07 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0504 - MP 0.07 - Sign

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0507 - MP 0.17 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0508 - MP 0.39 - Sign

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0511 - MP 0.49 - Begin Section

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0510 - MP 0.51 - Sign

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0512 - MP 0.65 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0513 - MP 0.66 - Begin Section

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0515 - MP 0.67 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0516 - MP 0.86 - Sign

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0519 - MP 0.46 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0517 - MP 0.87 - Begin Section

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0518 - MP 1.03 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0520 - MP 1.17 - Sign

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0521 - MP 1.20 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0522 - MP 1.24 - Sign

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0523 - MP 0.40 - Begin Section

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T301
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0524 - MP 0.43 - Sign

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1456 - MP 0.00 - Trailhead

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1457 - MP 0.00 - Sign

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1458 - MP 0.07 - Begin Section

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0479 - MP 0.07 - Sign

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0480 - MP 0.24 - Bridge -sf

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0482 - MP 0.84 - Sign

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0483 - MP 1.01 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0485 - MP 1.47 - Sign

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0484 - MP 1.48 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0487 - MP 1.66 - Sign

TRAIL NUMBER: T401
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1466 - MP 0.00 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0491 - MP 0.00 - Trailhead

TRAIL NUMBER: T401
STATION: Hagerman NWR
DATE: 09/13/2011



Photo # HAGE_C2_1465 - MP 0.29 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0492 - MP 0.76 - Bridge -sf

TRAIL NUMBER: T401
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0493 - MP 1.04 - Bridge -sf

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0495 - MP 1.17 - Bridge -sf

TRAIL NUMBER: T401
STATION: Hagerman NWR
DATE: 06/16/2006



Photo # HAGE_C2_0496 - MP 1.84 - Sign

Glossary of Terms and Abbreviations

Acc Info	Accessibility information available at trailhead.
Action	Action required to correct deficiency.
Admin Road	Administration Road. Admin Roads signed and advertised as trails are included in the trail inventory but a condition assessment is NOT done.
Alt SAMMS	SAMMS number of Alternate Facility Type.
Alt Type	Alternate Facility Type. Trail lies on a feature such as a levee, dam, administrative road or bridge, which has a separate SAMMS number.
AvgGrade	The average grade of the trail (%). The average of five measurements for trails less than two miles and ten measurements for trails equal to or greater than 2 miles.
AvgSlope	The average cross-slope of the trail (%). The average of five measurements for trails less than two miles and ten measurements for trails equal to or greater than 2 miles.
Check Dam	A small dam constructed across a drainage ditch, swale, or channel to lower the speed of concentrated flows.
Condition	Subjective rating of trail based on Facility Condition Index (FCI): FCI \leq .01 = Excellent FCI .02 - .05 = Good FCI .06 - .10 = Fair FCI .11 - .20 = Poor FCI $>$.20 = Failed
Crib Wall	Retaining wall.
Current Replacement Value (CRV)	The value of an asset determined by the estimated cost of replacing it.
Def type	Deficiency Type: Trail Structure, Drainage, Erosion, Obstacle, Trail Location, Other.
Deferred Maintenance (DM)	Maintenance that was not performed when scheduled.

Elem ID	Unique identifier for each trail section: Org Code-Trail Number-Section Number.
Facility Condition Index (FCI)	DM/CRV
Grouped Features	Grouped features include non-unique signs (mileposts, interpretive signs, species identification, etc.), water bars, check dams, steps, drain and drainage dips. For any given grouped feature, a GPS point and photo are taken for the first occurrence only and the total number of features in the group are entered into the “quantity” field of the data dictionary.
Info Type	Type of accessibility information available at trailhead: brochure, sign or other.
Item	Item on which the “Action” (see above) will be performed.
Manage_Use	Managed use of the trail: HIKE, BIKE, NSPC (non-specified), PACK, POR (portage), SNOWSHOE, XSKI (cross-country ski), OTHER.
MP	Distance of a trail feature or deficiency from the Trailhead.
Puncheon	Log footbridge used in area of poor drainage.
Raised Trail Structure	Boardwalk, Turnpike, Puncheon.
T Class	Trail Class: I-V (see Appendix ? for trail class descriptions).
Tr Desig	Trail Designation: Standard (Std), National Historic Trail (NHT), National Recreation Trail (NRT), National Scenic Trail (NST).
Turnpike	Trail tread elevated with dirt, rock or other aggregate from parallel side ditches and held in place by logs.